DOCUMENT RESUME

ED 365 492 RC 019 444

AUTHOR Lopez, Linda C.
TITLE Smokeless Tobacco Consumption by Mexican-American University Students.
SPONS AGENCY Western New Mexico Univ., Silver City.
PUB DATE Nov 93
NOTE 17p.; Paper presented at the Annual Meeting of the Arizona Educational Research Organization (Tucson, AZ, November 4-5, 1993).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Anglo Americans; *College Students; Females; Higher Education; Males; *Mexican Americans; *Student Attitudes; Surveys; Tobacco; Universities; Young Adults
IDENTIFIERS Chewing Tobacco; Hispanic American Students; New Mexico; *Smokeless Tobacco

ABSTRACT

A modified version of the Illinois Department of Public Health Tobacco Use Survey was used to assess smokeless tobacco consumption among students attending a state university in New Mexico. Respondents included 65 male and 83 female Mexican-Americans, as well as 59 male and 118 female Anglo-Americans. Ages ranged from 16 to 67; subgroup median ages were 23-25. Among Anglo-American female respondents, only three used chewing tobacco and one used snuff. No Mexican-American female used either form of smokeless tobacco. For males, use of smokeless tobacco was significantly greater among Anglo-Americans than among Mexican-Americans. Ten percent of Anglo males used chewing tobacco only, 8 percent used snuff only, and 15 percent used both. Seven percent of Hispanic males used chewing tobacco only, 3 percent used snuff only, and 7 percent used both. Both groups began using smokeless tobacco at an average age of 12-14 years. Over 90 percent of both groups believed that smokeless tobacco causes cancer. The results are compared to those of other studies of smokeless tobacco consumption among college and high school students. (SV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 365 492

SMOKELESS TOBACCO CONSUMPTION BY MEXICAN-AMERICAN UNIVERSITY STUDENTS

Linda C. Lopez

Western New Mexico University

Presented at the Annual Meeting of the Arizona Educational Research Organization, Tucson, Arizona, November 4-5, 1993

RC 019444

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Linda C. Lopez

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ABSTRACT

A modified version of the "Illinois Department of Public Health Tobacco Use Survey" was administered to 220 female and 134 male students attending a state university in New Mexico. The respondents included 65 male and 83 female Mexican-Americans, as well as 118 female and 59 male Anglo-Americans. All Mexican-American female respondents identified themselves as non-users of smokeless tobacco. Of the Anglo-American females, 1 (.008%) indicated that she used snuff, and 3 (2%) disclosed that they consumed chewing tobacco. Thirty-three percent of the Anglo-American males and 18% of the Mexican-American males stated that they used smokeless tobacco products. A Chi-Square analysis showed this difference to be significant ($\chi^2 = 3.84$, $p < .05$). Implications of these findings are discussed.

Smokeless Tobacco Consumption by Mexican-American University Students[1]

Information about smokeless tobacco consumption by Mexican-American college and university students is limited because prevalence studies tend to be conducted with predominantly Anglo-American samples [1,2,3,4,5,6]. Glover, Laflin, Flannery, and Albritton [4] surveyed 5,894 students who attended 72 colleges and universities. They reported that 12% of the Anglo-American respondents and 14% of the Mexican-Americans surveyed identified themselves as smokeless tobacco users.

The only other published study to date which provides information on smokeless tobacco consumption by Hispanic college and university students was conducted by Foreyt, Jackson, Squires, Hartung, Murray, and Gott [1]. In the process of gathering self-reports on smokeless tobacco consumption from 1,991 students attending four different Texas colleges and universities, these investigators surveyed approximately 107 Hispanic males. Female use for the entire sample was under 1%. However, 21% of the Anglo-American males and 5.4% of the Hispanic males indicated that they used smokeless tobacco.

[1] This investigation was supported by a Western New Mexico University faculty research grant.

Mexican-Americans are the second largest and fastest growing ethnic-minority group in the the United States [7]. Given the oral cancer risks associated with smokeless tobacco use [10], it is important that smokeless tobacco researchers investigate consumption rates among Hispanics. This information could be used to target specific populations for intervention.

METHOD

In order to assess the extent of smokeless tobacco consumption by Mexican-American university students, self-reports were collected from students attending a state university in New Mexico. Forty percent of the students enrolled at this university were Mexican-American [7].

A questionnaire containing 18 items was administered to 220 females and 134 males who attended a state university in southwestern New Mexico during the Fall 1991 semester. The questionnaire used was a modification of the "Illinois Department of Public Health Tobacco Use Survey" [11]. Information was solicited on smokeless tobacco use, health knowledge, and demographic characteristics. Students taking the survey were informed that their participation was voluntary and were given the opportunity to withdraw from

the study. To ensure confidentiality, subjects were asked not to write their names on the questionnaire.

The survey was completed by students enrolled in a variety of classes, including general psychology, American history, the west in American history, general sociology, social problems, and introduction to research methods. The enrollment populations of these courses included freshmen, sophomores, upper class students, and graduate students in master's degree programs.

The sample included 177 Anglo-Americans and 148 Mexican-Americans. Data were also collected from 2 Pacific Islanders, 2 Asians, 14 Native Americans, 8 African-Americans, and 2 individuals who described themselves as ethnically mixed; these data are not reported here because this investigation focuses on Anglo-American and Mexican-American students.

Participants in the survey included 118 Anglo-American females. The ages of this group ranged from 17 to 67. Their median age was 25. The sample included 83 Mexican-American females. Their ages ranged from 20 to 48. Their median age was 23.

Additionally, 65 Mexican-American males completed the questionnaire. Their ages ranged from 20 to 48, and their median age was 23. Finally, the sample included 59 Anglo-

American male respondents whose ages ranged from 16 to 61. The median age of this group was 23.

RESULTS

Of the female respondents, only one (.004%) Anglo-American identified herself as a snuff user. Eight Anglo-American females (6%) and 4 Mexican-American females (4%) tried snuff, but were not users.

Although none of the Mexican-American female participants reported using chewing tobacco, 3 (2%) of the Anglo-American females indicated that they tried chewing tobacco. Nine Anglo-American females (7%) and 1 Mexican-American female (1%) reported trying chewing tobacco.

Thirty-one (25%) of the male respondents used smokeless tobacco. Seven (5%) identified themselves as snuff users. Eleven (8%) indicated that they used chewing tobacco and 13 (10%) of the males reported using both snuff and chewing tobacco.

Of the Anglo-American males, 20 (33%) used smokeless tobacco, 5 (8%) reported using snuff, 6 (10%) indicated they chewed tobacco and 9 (15%) of this group used both snuff and chewing tobacco. Likewise, 12 (18%) of the Mexican-American

males identified themselves as smokeless tobacco users, 2 (3%) stated that they used snuff, 5 (7%) indicated that they used chewing tobacco, and 5 (7%) disclosed that they used both snuff and chewing tobacco. A Chi-Square analysis showed that the frequency of Anglo-American males who consumed smokeless tobacco was significantly greater than the frequency of Mexican-American males who used smokeless tobacco products ($\chi^2 = 3.84$, $p < .05$).

Of the Anglo-American male respondents, 15 (25%) had tried snuff and 15 (25%) had experimented with chewing tobacco. Similarly, 20 (30%) of the male Mexican-American respondents tried snuff and 20 (30%) tried chewing tobacco.

Anglo-American snuff users first began using this product at an average age of 14 years. The average age of initial use of chewing tobacco for Anglo-Americans was 12 years. Mexican-American snuff users started their use of this product at an average age of 12 years. Mexican-American tobacco chewers first began using this form of tobacco at an average age of 14 years.

The modal amount of snuff consumption for Anglo-American males was three cans per week. The bimodal amounts of chewing tobacco consumption for this group were less than one pouch per week, and three pouches per week. Mexican-Americans consumed a modal amount of less than one can of

snuff per week. The modal amount of chewing tobacco consumption for this group was less than one pouch per week.

Among the Mexican-American males, 92% perceived smokeless tobacco as a cancer risk, and 8% did not know if smokeless tobacco caused cancer. Similarly, 95% of the Anglo-American males believed smokeless tobacco caused cancer, and 5% did not know if smokeless tobacco caused cancer.

Of the Anglo-American males, 64% indicated that a friend encouraged them to use smokeless tobacco, and 21% reported that a sibling encouraged their use. Of the Mexican-American male users, 38% were encouraged by a friend to take up the habit, and 33% disclosed that they were encouraged to use smokeless tobacco by an athlete.

The most frequent reason Anglo-American males gave for their use of smokeless tobacco was enjoying the taste (45%). Stimulation was the second most frequent reason (25%) this group gave for their use. Like their Anglo-American counterparts, Mexican-American males most frequently gave enjoying the taste as their reason for use (38%). Being unable to stop using smokeless tobacco was the second most frequent reason for use (11%) among Mexican-Americans.

DISCUSSION

Mexican-American respondents constituted 41% of the sample. Their proportion in the sample was similar to their representation in the student body as a whole.

Consistent with other investigations of smokeless tobacco consumption by college and university students, use by female students was found to be negligible [1,4,5,12]. The responses of male students in this survey suggest that their rates of smokeless tobacco consumption are similar to those found for male college and university students in the southwest. Foreyt et al. [1] collected self reports from 1,991 Texas college and university students about their use of smokeless tobacco. These investigators report that 17% of the 916 male respondents indicated that they either had used or were currently using smokeless tobacco. As part of a national study, Glover, Johnson, Laflin, Edwards, and Christen [3] surveyed 314 male university students in Arizona; 27% of those respondents indicated that they used smokeless tobacco. Likewise, 27% of 84 male students attending a state university in southwestern New Mexico indicated when surveyed that they consumed smokeless tobacco [12].

Smokeless tobacco prevalence rates for male college

students in the southwest appear to be similar to national prevalence rates for male college and university students. Glover, Laflin, Flannery, and Albritton [4] surveyed a national sample of approximately 2,947 male college and university students about their smokeless tobacco consumption, and reported that 22% of the respondents identified themselves as smokeless tobacco users.

In this study, smokeless tobacco consumption rates for Anglo-American males were higher than those found for Mexican-American males. This pattern is the converse of that reported by Glover et al. [4]. These investigators collected self reports dealing with smokeless tobacco use from a national sample of 5,894 college students. Half the sample were male and half were female. Fourteen percent of the Mexican-Americans and 12% of the Anglo-Americans in that survey either dipped snuff, chewed tobacco, or used both snuff and chewing tobacco.

The rate of smokeless tobacco use for Mexican-American males in this study was 18%. This rate was higher than that found for Mexican-American males attending a high school located in the same region as the university where this study took place. Lopez and Hamlin [13] found that 7% of 179 Mexican-American male high school students reported using smokeless tobacco. The number of Anglo-American

respondents in that survey was too small to allow comparison.

The prevalence rates of smokeless tobacco consumption for southwestern New Mexico are higher than national rates of consumption. Survey results indicate that less than 5% of the male population in the United States uses smokeless tobacco [14]. A 1990 telephone survey of Grant County, New Mexico, residents was conducted in which 1 out of every 25 phone numbers from the county telephone directory were called. In this study, 33% of 96 males and 7% of 82 females identified themselves as smokeless tobacco users [15]. Additionally, a 1991 telephone survey of Grant County residents, using a 1 in 25 systematic random sampling from the Grant County telephone directory, found that 25% of 51 Anglo-American males and 26% of 30 Mexican-American males identified themselves as smokeless tobacco users [16]. The 46 Mexican-American and 81 Anglo-American female respondents in that study indicated that they did not use smokeless tobacco.

The rates of smokeless tobacco use by Anglo-American males in the present study are significantly higher than for Mexican-American males. Nevertheless, the data from this investigation does suggest that many Mexican-American males, like their Anglo-American counterparts, are consuming

smokeless tobacco products. Given the oral cancer risks associated with smokeless tobacco [10], colleges and universities should attempt to discourage this practice. Such measures as removing vending machines that distribute smokeless tobacco products from college and university campuses, and prohibiting sales of smokeless tobacco by campus bookstores, might be considered. Since the male users of smokeless tobacco indicate that their initial use occurred during their elementary and junior high school years, education about these products and their potential effects should be provided to students as young as nine years of age. Several researchers found that informed individuals are less prone to use smokeless tobacco than those who are unaware of the health risks of these products [17, 18]. Since effective smokeless tobacco cessation programs have not been developed, more research on cessation techniques is also needed [19,20].

REFERENCES

1. J.P. Foreyt, A.S. Jackson, W.G. Squires, G.H. Hartung, T.D. Murray, and A.M. Goho, Psychological Profile of College Students Who Used Smokeless Tobacco, Addictive Behaviors, 21, pp. 107-116, 1993.

2. E.D. Glover, E.W. Edmondson, P.P. Alston, D. Holbert, and K.L. Schroeder, Prevalence and Patterns of Smokeless Tobacco Use in a Southeastern University, Journal of Drug Education, 17, pp. 201-211, 1987.

3. E.D. Glover, R. Johnson, M. Laflin, S.W. Edwards, and A.G. Christen, Smokeless Tobacco Use Trends among College Students in the United States, World Smoking and Health, 11, pp. 4-9, 1986.

4. E.D. Glover, M. Laflin, D. Flannery, and D.L. Albritton, Smokeless Tobacco Use among American College Students, Journal of American College Health, 38, pp. 81-85, 1989.

5. L.C. Lopez, Smokeless Tobacco on Campus, Psychological Reports, 63, pp. 439-442, 1988.

6. R.J. McDermott and P.J. Martin, Dipping and Chewing Behavior among University Students: Prevalence and Patterns of Use, Journal of School Health, 56, pp. 175-177, 1986.

7. The Mustang staff, Record High Attending Western, The Mustang, p. 1, September 1991.

8. M.B. Arias, The Context of Education for Hispanic Students: an Overview, American Journal of Education, 95, pp. 26-27, 1986.

9. F.D. Bean and M. Tienda, The Hispanic Population of the United States, Russell Sage Foundation, New York, New York, 1987.

10. A. Gottlieb, S.K. Pope, V.I. Rickert, and B.H. Hardin, Patterns of Smokeless Tobacco Use by Young Adolescents, Pediatrics, 91, pp. 75-78, 1993.

11. Illinois Department of Public Health, Smokeless Tobacco Survey, Illinois Department of Public Health, Springfield, Illinois, 1987.

12. L.C. Lopez, Prevalence of Smokeless Tobacco Consumption at a Southwestern University, Psychological Reports, 67, pp. 225-226, 1990.

13. L.C. Lopez and P.A. Hamlin. (1993, October). Smokeless Tobacco Consumption by Mexican-American High School Students. Paper presented at the Annual Rural and Small School Conference, Manhattan, Kansas.

14. Advisory Committee to the Surgeon General, The Health Consequences of Using Smokeless Tobacco, U.S. Department of Health and Human Services, Bethesda, Maryland, 1986.

15. L.C. Lopez, Smokeless Tobacco Consumption in Grant County, New Mexico, The International Journal of the Addictions, 27, pp. 1131-1135, 1992.

16. L.C. Lopez and K. Sanchez-Rico, Smokeless Tobacco Consumption by Mexican-Americans and Anglo-Americans in Southwestern New Mexico, International Journal of the Addictions, in press.

17. D.V. Ary, E. Lichtenstein, H. Severson, W. Weissman, and J.R. Seeley, An In-depth Analysis of Male

Adolescent Smokeless Tobacco Users: Interviews with Users and their Fathers, Journal of Behavioral Medicine, 16, pp. 402-421, 1989.

18. S. Schinke, L. Gilchrist, R. Schilling, and V. Senechal, Smoking and Smokeless Tobacco Results, Public Health Report, 101, pp. 373-378, 1986.

19. J.P. Eakin, H. Severson, and R. Glasgow, Development and Evaluation of a Smokeless Tobacco Cessation Program, National Cancer Institute Monograph, 8, pp. 95-100, 1989.

20. E.D. Glover, Conducting Smokeless Tobacco Cessation Clinics, American Journal of Public Health, 76, p. 207, 1986.